**Earth: Slow Changes Book**

**Grade 5**

1. Explain that we are discussing “Weathering” this week for Science. Draw on a board or a poster sheet the following: Weathering: Glaciers, Water, or Wind
2. Ask class: “What is weathering?” Answer: the breaking down of rock by glaciers, water or wind. Erosion is the transportation of the material…if they ask or if it comes up.
3. Place students in teams of 2 so that they can share a book (only if you do not have enough books). Each student will need a sheet of papers too. Have them number the paper 1-15.
4. Ask students a question and have them answer it on their paper. Each partner can work together, but they must write the answer on their own sheet of paper. Keep score of which team gets the answers first. Winning team receives the candy bar.

Use Chapter 1 for the following questions:

1. What does the word **grind** mean in this book? (clue on pg 9; grind into dust)
2. How much of the Earth’s surface is covered by glaciers? (pg 5; 1/10 of Earth)
3. Glaciers can run into oceans and break off pieces called icebergs. The world’s largest iceberg is about as big as….? (pg 7; the state of Rhode Island)
4. Glaciers scrape against mountain walls and make them….? (pg 6; smooth)

\*\*make sure that they know Glaciers help carve mountains

Use Chapter 2 for the following questions:

1. The land at the end of a river made up of tiny dirt and clay is called a \_\_\_? (pg 14; delta)
2. Rainwater seeps into the Erath and can eventually form a \_\_\_\_\_ ? (pg 17; cave)
3. What formed the Grand Canyons? (pg 12; the Colorado River)

Use Chapter 3 for the following questions:

1. The \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ was a period of time in the 1930’s where all of the top soil was blown all the way across America. (pg 22; Dust Bowl)
2. Sand collects in huge piles called \_\_\_\_\_\_? (pg 20; dunes)
3. Dunes get larger when something anchors the sand down like \_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, or \_\_\_\_\_\_\_\_\_\_? (pg 21; rocks, trees, or grass)

Use Chapter 4 for the following questions:

1. Pink beaches are made up of tiny bits of \_\_\_\_\_\_\_\_\_\_\_\_\_? (pg 27; seashells)
2. To stop beach erosion, people put up \_\_\_\_\_\_\_\_\_\_\_\_\_\_? (pg 29; seawalls)
3. Wind and Water are types of erosion that can form \_\_\_\_\_\_\_ \_\_\_\_\_\_\_, \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_, or \_\_\_\_\_\_\_\_\_. (pg 30; sea caves, rock arches, or beaches.)

\*\*make sure they know that the snake shape a rivers is called a meandering river

1. Ask the teams to read through Chapter 4 and answer this cause and effect chart: What happens when waves erode all the way through the cliffs? The drawing will need to be on the back of their paper along with 2-3 pictures. They must know this pyramid concept for TAKS.

1. Waves erode through cliffs.

2. An arch forms

3. Waves and wind wear around rocks

4. Top of the arch falls in the water

5. Tower of rock stands alone in the water

